Abstract

A micro-pump that supplies medication from a reservoir to a patient through a flexible tube is disclosed. The pump, which is especially suitable but not confined to delivering insulin to diabetic patients, is small and light enough to be attached to the body using adhesive plaster or to be strapped to the body in any other manner. In the preferred embodiment the pump mechanism comprises a lead screw, a weak force rotating element, an actuator, and a high force holding element. The device also includes a processing circuitry for controlling and monitoring the drive mechanism, a force sensor to measure medication pressure which generates indicative signals to the processing circuitry, a sensor for tracking the position of the syringe plunger, and a remote control unit.